Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Cancelled)

2. (Currently amended) An electric motor, comprising:

a) a pair of stator teeth, having a stator slot therebetween, ~~the~~said stator slot having a slot opening which faces a rotor in the motor, which rotor rotates about an axis; and

b) means for increasing magnetic flux passing through the slot opening, wherein the means comprises a body which is located radially outward of the slot opening and located farther from said axis than the slot opening.

3. (Original) The motor according to claim 2 wherein the means is magnetically and physically continuous with one of the stator teeth.

4. (Previously presented) The motor according to claim 2 wherein the means reduces cogging torque of the motor.

5. (Original) An electric motor, comprising:

a) a pair of stator teeth, having a stator slot therebetween, the stator slot having a radial slot opening; and

b) a body located radially outward of the slot opening, which increases magnetic flux passing through the slot opening.

6. (Original) The motor according to claim 5 wherein the body is magnetically continuous with one of the teeth.

7. (Original) The motor according to claim 5 wherein the body is physically continuous with one of the teeth.

8. (Original) The motor according to claim 5 wherein the body is both physically and magnetically continuous with one of the teeth.

9. (Previously presented) The motor according to claim 5, wherein the body reduces cogging torque of the motor when no current is applied to the motor.

10. (Cancelled)

11. (Previously presented) In an electric motor having a rotor, the improvement comprising:

a) stator coils, and

b) stator core means for decreasing mid-phase reluctance of the rotor,

wherein the stator core means comprises a slot having a straight central axis, and said central axis is non-radial.

12. (Original) The improvement according to claim 11, wherein said central axis has

i) a radially inner region which crosses a radial line of the rotor, and

ii) a radially outer region which is spaced circumferentially from said radial line.

13. (Currently amended) In an electric motor having a rotor, the improvement comprising:

a) stator teeth, and

b) a non-radial slot opening separating neighboring stator teeth, which slot opening has two flat walls extending along its length, which walls comprise flat surfaces on said teeth.

14. (Original) The improvement according to claim 13, wherein the non-radial slot opening decreases mid-phase reluctance of the rotor, compared with a radial slot opening.

15. (Original) The improvement according to claim 13, wherein the non-radial slot opening decreases cogging torque, compared with a radial slot opening.

16. (Original) The improvement according to claim 13, wherein the non-radial slot opening comprises a central axis, and said central axis has

i) a radially inner region which crosses a radial line of the rotor, and

ii) a radially outer region which is spaced circumferentially from said radial line.

17. (Currently amended) An electric motor, comprising:

a) a rotor;

b) an array of stator teeth surrounding the rotor, each stator tooth separated from its neighbor by a non-radial slot opening, which slot opening has two walls extending along its length,

i) one wall formed by a facet of one tooth and

ii) another wall formed by a surface of an adjacent tooth.

18. - 26. (Cancelled)

27. (Currently amended) An electric motor, comprising:

a) a first stator tooth surrounded by a first coil;

b) a second stator tooth surrounded by a second coil, substantially identical to the first coil;

c) an elongated space separating the first and second stator teeth and having

i) a radially innermost slot opening and

ii) a central axis which is non-radial; and

d) a body which is magnetically continuous with the first stator tooth, and has a radially inner surface which is radially outside said innermost slot opening.

28. (Currently amended) An electric motor, comprising:

a) a rotor;

b) a first stator tooth having a radially inner face which includes

i) a first region of constant radius, and

ii) a circumferential boundary region to a slot opening that is not parallel to a radial line of said rotor, wherein the slot opening separates the stator tooth from an adjacent stator tooth which adjacent stator tooth includes

i) a first region of constant radius, and

ii) a circumferential boundary region to a slot opening that is not parallel to a radial line of said rotor.

29. (Previously presented) The electric motor as recited in claim 28 wherein the circumferential boundary region does not lie in the same plane as the first region.

30 – 34. Cancelled

35. (Currently amended) An electric motor, comprising:

a) a rotor having a generally circumferential outer surface;

b) a first stator tooth, having a radially inner surface which includes

i) a first section which is generally parallel with the outer surface, and

ii) a second section which

A) is non-parallel with said outer surface and

B) cooperates with said outer surface to form a void;

c) a second stator tooth, having a section which extends into the void; and

d) two substantially identical coils, one around the first tooth and one around the second tooth.

36. (Currently amended) An electric motor, comprising:

a) a radial array of stator teeth, each surrounded by a coil, all coils being substantially identical;

b) a slot between each pair of neighboring teeth, which slot

i) is bordered by one surface on each tooth; and

ii) has a central axis, midway between the surfaces, which is non-radial.

37. (Previously presented) Motor according to claim 36, wherein the slot is generally V-shaped.

38. (Currently amended) An electric motor, comprising:

a) a rotor

b) a radial array of stator teeth, each surrounded by a coil, with all coils being substantially identical;

c) at an end of each tooth nearest the rotor,

i) an extension A which extends counterclockwise; and

ii) an extension B which extends clockwise;

wherein each extension A on a tooth partly overlaps extension B on its neighboring tooth.

39. (Previously presented) Motor according to claim 38, wherein each extension A cooperates with a neighboring extension B to form an elongated slot having a central axis which is non-radial.